

ABSTRACT OF THE DISCLOSURE

A method and apparatus for providing a welding current is disclosed. The power source is capable of receiving any input voltage over a wide range of input  
5 voltages and includes an input rectifier that rectifies the ac input into a dc signal. A dc voltage stage converts the dc signal to a desired dc voltage and an inverter inverts the dc signal into a second ac signal. An output transformer receives the second ac signal and  
10 provides a third ac signal that has a current magnitude suitable for welding. The welding current may be rectified and smoothed by an output inductor and an output rectifier. A controller provides control signals to the inverter and an auxiliary power controller that  
15 can receive a range of input voltages and provide a control power signal to the controller.